## CLAIMS

- 1. Use of a vitamin D compound in the prevention or treatment of interstitial cystitis.
- 2. The use of a vitamin D compound as defined in claim 1 in the manufacture of a medicament for the prevention or treatment of interstitial cystitis.
- 3. A method for preventing and/or treating interstitial cystitis by administering an effective amount of a vitamin D compound.
- 4. The use or method of any one of claims 1 to 3, wherein said interstitial cystitis is characterized by the presence of symptoms of bladder dysfunction and bladder inflammation.
- 5. The use or method according to any one of claims 1 to 4 wherein the vitamin D compound is administered separately, sequentially or simultaneously in separate or combined pharmaceutical formulations with a second medicament for the treatment of interstitial cystitis.
- 6. A pharmaceutical formulation comprising a vitamin D compound and a pharmaceutically acceptable carrier for use in the prevention and/or treatment of interstitial cystitis.
- 7. A pharmaceutical formulation comprising a vitamin D compound and a pharmaceutically acceptable carrier packaged with instructions for use in the prevention and/or treatment of interstitial cystitis.
- 8. A vitamin D compound for use in the prevention and/or treatment of interstitial cystitis.
- 9. A kit containing a vitamin D compound together with instructions directing administration of said compound to a patient in need of treatment and/or prevention of interstitial cystitis thereby to treat and/or prevent interstitial cystitis in said patient.

10. The use, method, formulation, compound or kit of any one of claims 1 to 9, wherein said vitamin D compound is a compound of the formula:

$$R_3$$
 $R_4$ 
 $R_5$ 
 $R_6$ 
 $R_7$ 
 $R_7$ 
 $R_7$ 

wherein:

A<sub>1</sub> is single or double bond;

A<sub>2</sub> is a single, double or triple bond;

 $X_1$  and  $X_2$  are each independently H or =CH<sub>2</sub>, provided  $X_1$  and  $X_2$  are not both =CH<sub>2</sub>;

 $R_1$  and  $R_2$  are each independently OC(O)C<sub>1</sub>-C<sub>4</sub> alkyl, OC(O)hydroxyalkyl, OROC(O)haloalkyl, OAc;

 $R_3$ ,  $R_4$  and  $R_5$  are each independently hydrogen,  $C_1$ - $C_4$  alkyl, hydroxyalkyl, or haloalkyl, or  $R_3$  and  $R_4$  taken together with  $C_{20}$  form  $C_3$ - $C_6$  cycloalkyl; and

 $R_6$  and  $R_7$  are each independently  $C_{1\text{--}4}$  alkyl or haloalkyl; and

R<sub>8</sub> is H, -COC<sub>1</sub>-C<sub>4</sub>alkyl, -COhydroxyalkyl or -COhaloalkyl; and pharmaceutically acceptable esters, salts, and prodrugs thereof.

11. The use, method formulation, compound or kit of any one of claims 1 to 9, wherein said vitamin D compound is a compound of the formula:

$$R_{3}$$
 $R_{2}$ 
 $R_{3}$ 
 $R_{4}$ 
 $R_{4}$ 
 $R_{4}$ 

wherein:

X is H<sub>2</sub> or CH<sub>2</sub>

R<sub>1</sub> is hydrogen, hydroxy or fluorine

R<sub>2</sub> is hydrogen or methyl

 $R_3$  is hydrogen or methyl provided that when  $R_2$  or  $R_3$  is methyl,  $R_3$  or  $R_2$  must be hydrogen

R4 is methyl, ethyl or trifluoromethyl

R<sub>5</sub> is methyl, ethyl or trifluoromethyl

A is a single or double bond

B is a single, E-double, Z-double or triple bond

- 12. The use ,method, formulation, compound or kit according to claim 11, wherein each of  $R_4$  and  $R_5$  is methyl or ethyl.
- 13. The use, method formulation, compound or kit\_of any one of claims 1 to 9, wherein said vitamin D compound is 1,3-Di-O-acetyl-1,25-dihydroxy-16,23Z-diene-26,27-hexafluoro-19-nor-cholecalciferol, having the formula:

14. The use, method formulation, compound or kit of any one of claims 1 to 9, wherein said vitamin D compound is 1-alpha-fluoro-25-hydroxy-16,23E-diene-26,27-bishomo-20-epi-cholecalciferol, having the formula:

15. The use, method, formulation, compound or kit of any one of claims 1 to 9 wherein said compound is 1,3-Di-O-acetyl-1,25-dihydroxy-20-cyclopropyl-23E-ene-26,27-hexafluoro-19-nor-cholecalciferol, having the formula:.